

Annual Report 2010

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



Company Information

Company Name: **Devon Energy**

Gas STAR Contact: **Joe Leonard**

Title **EHS Engineer**

Address: **20 N Broadway Ave**

City: **Oklahoma City**

State: **OK**

Zip: **73102**

Phone: **405-552-4740**

Fax:

E-mail: **joe.leonard@devon.com**

Company Information Updated: **Yes**

Activities Reported

BMP1: No BMP2: No BMP3: Yes

Total Methane Emission Reductions Reported This Year: **11,322,176**

Previous Years' Activities Reported: **No**

Period Covered by Report

From: **01/01/2010**

To: **12/31/2010**

☒ I hereby certify the accuracy of the data contained in this report.

Additional Comments

Methane volume data reported under PRO – Reduced Emission Completion (REC) is not suitable to be used for estimating methane emissions from non REC wells.

The REC methane emission reductions reported are in fact methane volumes that were not emitted to the atmosphere.

However, for the following reasons, REC reported methane volumes do not necessarily represent the methane volumes that would be emitted to the atmosphere from wells that do not employ RECs. Measurement of methane emissions from a statistically significant number of non REC completed wells is the only reliable method to determine methane emissions from these wells.

1. Because product is not being lost when “green completing” the operator has the luxury of flowing a well back longer than would be typical if the well was flowing back to atmosphere or flare. Longer flowbacks result in a better clean up and at Devon, we have taken advantage of the opportunity to flowback longer with green completion equipment because it results in better producing wells.

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2. In some cases, the rental green completion equipment is kept in service beyond what would be needed for flowback while production facilities are constructed. Again, since the gas is being captured, there is some freedom in the timing to have production facilities ready to accept a new well's production.

3. Production equipment is sized for a specific liquid throughput. Often, green completion equipment is kept in service until the well's initial fluid production decreases to a point where it can be accommodated by the production separation equipment on location. This option is chosen to avoid having to construct production equipment that would quickly be oversized once initial production declines.

In contrast, non REC wells would be flowed back only long enough to assess the success of a well. They would then be shut in until they are able to be flowed into a pipeline.

Joe will be the new contact for Gas STAR, but Steve will still be available to answer questions if needed.

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western

B. Description of PRO

Please specify the technology or practice that was implemented:

Artificial lift: install plunger lifts (10 years)

Please describe how your company implemented this PRO:

Install plunger lift systems to reduce venting

C. Level of Implementation

Number of units installed: 301 units

D. Methane Emissions Reduction

Methane Emissions Reduction: 1,058,407 Mcf/year

Basis for the emissions reduction estimate: Actual field measurement

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year

☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 7,408,849**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Flare reduction program

Please describe how your company implemented this PRO:

Flare reduction program in the Western Division

C. Level of Implementation

Number of units installed: 76 units

D. Methane Emissions Reduction

Methane Emissions Reduction: **71,990 Mcf/year**

Basis for the emissions reduction estimate: **Actual field measurement**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 503,930**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western

B. Description of PRO

Please specify the technology or practice that was implemented:

Install electric compressors (10 years)

Please describe how your company implemented this PRO:

Installed electric compression

C. Level of Implementation

Number of units installed: 183 units

D. Methane Emissions Reduction

Methane Emissions Reduction: **265,910 Mcf/year**

Basis for the emissions reduction estimate: **Calculation using manufacturer specifications**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year

☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 1,861,370**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Install no bleed controllers (10 years)

Please describe how your company implemented this PRO:

Install no bleed pneumatic controllers on all new installations

C. Level of Implementation

Number of units installed: 307 units

D. Methane Emissions Reduction

Methane Emissions Reduction: **646,332 Mcf/year**

Basis for the emissions reduction estimate: **Calculation using manufacturer specifications**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ **4,524,324**

\$ / Mcf used: \$ **7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western

B. Description of PRO

Please specify the technology or practice that was implemented:

Install no bleed controllers (10 years)

Please describe how your company implemented this PRO:

Install no bleed pneumatic controllers on all new installations.

C. Level of Implementation

Number of units installed: 9 units

D. Methane Emissions Reduction

Methane Emissions Reduction: **634 Mcf/year**

Basis for the emissions reduction estimate: **Calculation using manufacturer specifications**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year

☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 4,438**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western

B. Description of PRO

Please specify the technology or practice that was implemented:

Install vapor recovery units (VRUs) (10 years)

Please describe how your company implemented this PRO:

Vapor recovery units.

C. Level of Implementation

Number of units installed: 302 units

D. Methane Emissions Reduction

Methane Emissions Reduction: 1,843,392 Mcf/year

Basis for the emissions reduction estimate: Calculation using manufacturer specifications

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year

Multi-year

If Multi-year:

- ✓ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ **12,903,744**

\$ / Mcf used: \$ **7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Other (Please specify)

Please describe how your company implemented this PRO:

AOF testing on all Barnett Shale wells.

C. Level of Implementation

Number of units installed: 315 units

D. Methane Emissions Reduction

Methane Emissions Reduction: **109,620 Mcf/year**

Basis for the emissions reduction estimate: **Other**

Calculations based on formation characteristics

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 767,340**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Perform reduced emissions completions

Please describe how your company implemented this PRO:

A “green completion” is a completion where we begin selling gas via pipeline as soon as the well shows sufficient gas. In a “normal completion” we historically “cleaned up” the well before selling gas, which involved venting to the atmosphere until an acceptable ratio of gas to trash and liquids was achieved. This is achieved utilizing several different methods, in some areas, temporary separators and vapor recovery units are utilized to remove impurities and capture gas as the fracture fluid is recovered. In other areas out production staff works closely with our marketing and midstream group to insure that a pipeline is available for sales as soon as the well begins flowing back.

C. Level of Implementation

Number of units installed: 423 units

D. Methane Emissions Reduction

Methane Emissions Reduction: 4,548,359 Mcf/year

Basis for the emissions reduction estimate: Actual field measurement

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 31,838,513**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Southern Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Perform reduced emissions completions

Please describe how your company implemented this PRO:

A “green completion” is a completion where we begin selling gas via pipeline as soon as the well shows sufficient gas. In a “normal completion” we historically “cleaned up” the well before selling gas, which involved venting to the atmosphere until an acceptable ratio of gas to trash and liquids was achieved. This is achieved utilizing several different methods, in some areas, temporary separators and vapor recovery units are utilized to remove impurities and capture gas as the fracture fluid is recovered. In other areas out production staff works closely with our marketing and midstream group to insure that a pipeline is available for sales as soon as the well begins flowing back.

C. Level of Implementation

Number of units installed: 74 units

D. Methane Emissions Reduction

Methane Emissions Reduction: 2,092,469 Mcf/year

Basis for the emissions reduction estimate: Actual field measurement

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 14,647,283**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Perform reduced emissions completions

Please describe how your company implemented this PRO:

A “green completion” is a completion where we begin selling gas via pipeline as soon as the well shows sufficient gas. In a “normal completion” we historically “cleaned up” the well before selling gas, which involved venting to the atmosphere until an acceptable ratio of gas to trash and liquids was achieved. This is achieved utilizing several different methods, in some areas, temporary separators and vapor recovery units are utilized to remove impurities and capture gas as the fracture fluid is recovered. In other areas our production staff works closely with our marketing and midstream group to insure that a pipeline is available for sales as soon as the well begins flowing back.

C. Level of Implementation

Number of units installed: 332 units

D. Methane Emissions Reduction

Methane Emissions Reduction: 685,063 Mcf/year

Basis for the emissions reduction estimate: Actual field measurement

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 4,795,441**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

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Additional Accomplishments